UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

## NOTICE OF ALLOWANCE AND FEE(S) DUE

79292

7590

02/02/2011

Boston Scientific Corporation c/o Frommer Lawrence & Haug LLP 745 Fifth Avenue New York, NY 10151

EXAMINER				
LAMPRECHT, JOEL				
ART UNIT	PAPER NUMBER			

3737

DATE MAILED: 02/02/2011

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689.767	10/20/2003	Mark Hamm	1362001-2033	4545

TITLE OF INVENTION: TRANSDUCER/SENSOR ASSEMBLY

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	05/02/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ar in m

maintenance fee notifica CURRENT CORRESPOND	F	ee(s) Transmittal Thi	s certif I paper	icate cannot be used fo , such as an assignmen	domestic mailings of the or any other accompanying tor formal drawing, must		
c/o Frommer La 745 Fifth Avenu				Cor	tificate	of Mailing or Trans	nission deposited with the United t class mail in an envelope above, or being facsimile te indicated below.
New York, NY	10151		L				(Depositor's name)
			Ļ				(Signature)
			L				(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO	)R	ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/689,767	10/20/2003		Mark Hamm			1362001-2033	4545
TITLE OF INVENTION			T				
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DU		E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0		\$1810	05/02/2011
EXAM	IINER	ART UNIT	CLASS-SUBCLASS				
LAMPREC	CHT, JOEL	3737	600-425000				
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A PLEASE NOTE: Uni	ND RESIDENCE DATA less an assignee is ident h in 37 CFR 3.11. Comp	" Indication form led. Use of a Customer A TO BE PRINTED ON	or agents OR, altern.  (2) the name of a single registered attorney of a registered patent a listed, no name will the PATENT (print or data will appear on the	gle firm (having as a r agent) and the name torneys or agents. If the printed.  Type)  patent. If an assigner assignment.	membes of uno name	er a 2p to see is 3	cument has been filed for
Please check the appropr	riate assignee category or	categories (will not be pr	rinted on the patent):	☐ Individual ☐ Co	orporati	on or other private gro	up entity 🗖 Government
4a. The following fee(s) are submitted:  ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			<ul> <li>4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)</li> <li>A check is enclosed.</li> <li>Payment by credit card. Form PTO-2038 is attached.</li> <li>The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).</li> </ul>				
5. Change in Entity Sta	itus (from status indicated as SMALL ENTITY statu		☐ b. Applicant is no l	onger claiming SMAI	LL EN	ΓΙΤΥ status. See 37 CF	R 1.27(g)(2).
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if requeecords of the United Sta	uired) will not be accepte tes Patent and Trademark	ed from anyone other that COffice.	n the applicant; a regi	stered :	attorney or agent; or th	e assignee or other party in
Authorized Signature				Date			
				-			
This collection of informan application. Confiden submitting the complete	nation is required by 37 C tiality is governed by 35 d application form to the	FR 1.311. The informati U.S.C. 122 and 37 CFR USPTO. Time will vary	on is required to obtain of 1.14. This collection is value depending upon the in	r retain a benefit by the estimated to take 12 r dividual case. Any co	he publ ninutes mment	ic which is to file (and to complete, including s on the amount of tin	by the USPTO to process's g gathering, preparing, and ne you require to complete rtment of Commerce, P.O.

all application. Confidentially is governed by the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE		FILING DATE FIRST NAMED INVENTOR		CONFIRMATION NO.
10/689,767	10/20/2003		Mark Hamm	1362001-2033	4545
79292	7590	02/02/2011		EXAM	IINER
Boston Scientific Corporation				LAMPRECHT, JOEL	
c/o Frommer Lawrence & Haug LLP			ART UNIT	PAPER NUMBER	
745 Fifth Avenue New York, NY 10151			3737 DATE MAILED: 02/02/201	1	

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1312 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1312 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)	
	10/689,767	HAMM ET AL.	
Notice of Allowability	Examiner	Art Unit	
	JOEL M. LAMPRECHT	3737	
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313 1.   This communication is responsive to Response of 11/19/20	(OR REMAINS) CLOSED in to or other appropriate commur GHTS. This application is sure and MPEP 1308.	his application. If not included ication will be mailed in due course	
2. X The allowed claim(s) is/are <u>1,4-10,12-16 and 18-34</u> .			
3. ☐ Acknowledgment is made of a claim for foreign priority undirection of the content of the c	been received. been received in Application cuments have been received of this communication to file a	No in this national stage application fro	
noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give	itted. Note the attached EXAN		≣ OF
5. CORRECTED DRAWINGS ( as "replacement sheets") mus	st be submitted.		
(a) I including changes required by the Notice of Draftspers	on's Patent Drawing Review	( PTO-948) attached	
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date	•		
(b) including changes required by the attached Examiner's Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the state of the sheet.	.84(c)) should be written on the	drawings in the front (not the back)	of
DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT	sit of BIOLOGICAL MATE	RIAL must be submitted. Note th	ie
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☐ Interview Sur Paper No./M 7. ☐ Examiner's A	ormal Patent Application nmary (PTO-413), lail Date mendment/Comment tatement of Reasons for Allowance	€

### **DETAILED ACTION**

## Allowable Subject Matter

Claims 1, 4-10, 12-16, and 18-34 are allowed.

### **REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance: The closest reasonable prior art to the instant application does not disclose a combination imaging/sensor catheter including conductive coils and non-conductive material disposed over the sensor but still retaining traces in the non-conductive material to electrically couple the imaging device to an energy source. As with the allowance of patent 7,081,094 to the same inventor, these elements are novel and not disclosed elsewhere, but separating this application from the '094 patent is the placement of traces over the sensor for electrical coupling and also the non-conductive layer of epoxy used in claim 16 for imbedding the distal connections.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

Art Unit: 3737

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOEL M. LAMPRECHT whose telephone number is (571)272-3250. The examiner can normally be reached on 8:30-5:00 Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on (571) 272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BRIAN CASLER/ Supervisory Patent Examiner, Art Unit 3737

**JML**